

Advanced Topics for the Portfolio Manager Initiative: Energy Disclosure Policy Implementation

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Joel Blaine, DOE

This presentation is brought to you by DOE's Technical Assistance Program (TAP) in collaboration with The Institute for Market Transformation (IMT).

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Advanced Topics for the Portfolio Manager Initiative: **Energy Disclosure Policy Implementation**

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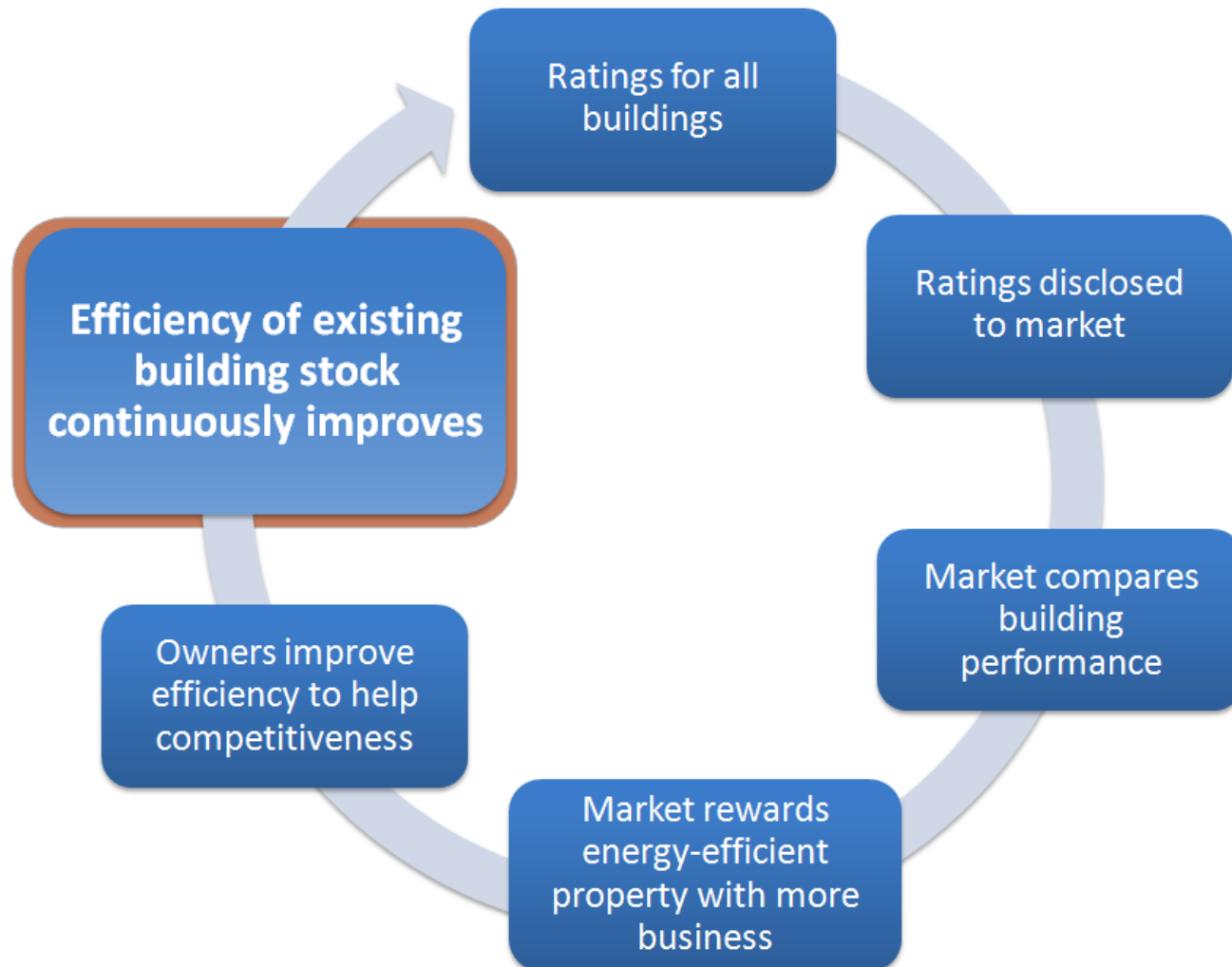


What is rating and disclosure?



Why would you do it? What are the benefits?

“When performance is measured, performance improves. When performance is measured and reported back, the rate of improvement accelerates.”
-Thomas S. Monson



Where is it happening? Around the World.

1997: Denmark requires energy certification for homes and buildings

2004: Norway, part of the European Economic Area, formally agrees to implement the EPBD and building certification requirements

2007: Brazil adopts voluntary building rating regulations that become mandatory in 2012



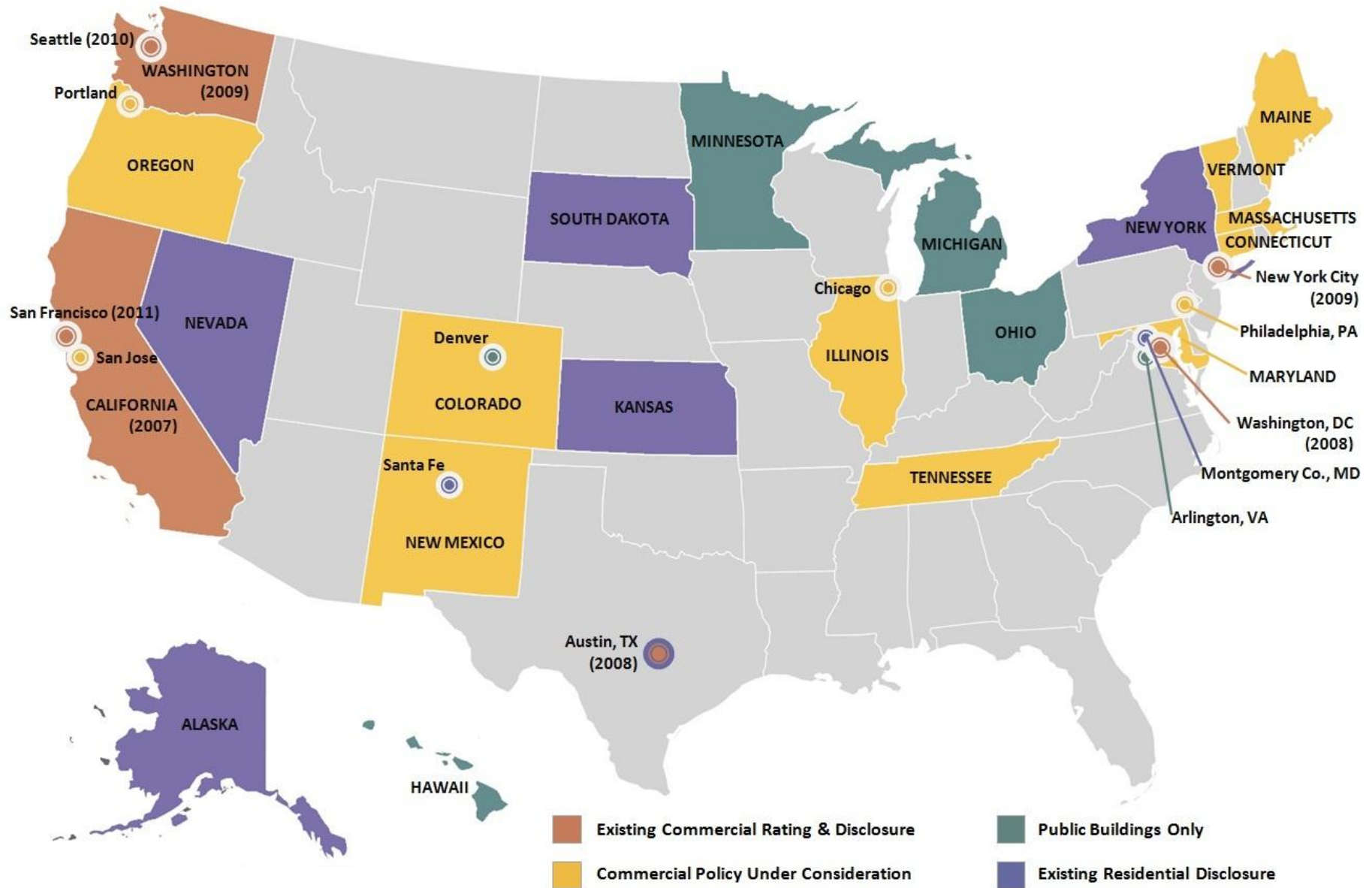
2002: The European Parliament adopts the Energy Performance of Buildings Directive (EPBD), requiring all **EU Member States** to establish mandatory energy certification schemes for homes and buildings



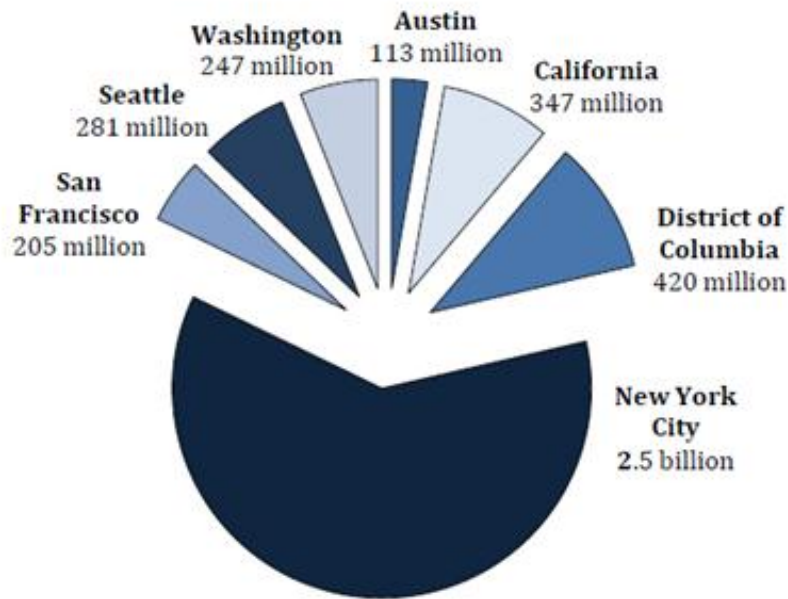
2008: China adopts a mandatory energy rating program for government buildings. **Turkey** adopts a mandatory certification scheme

2010: Australia adopts a mandatory building certification scheme

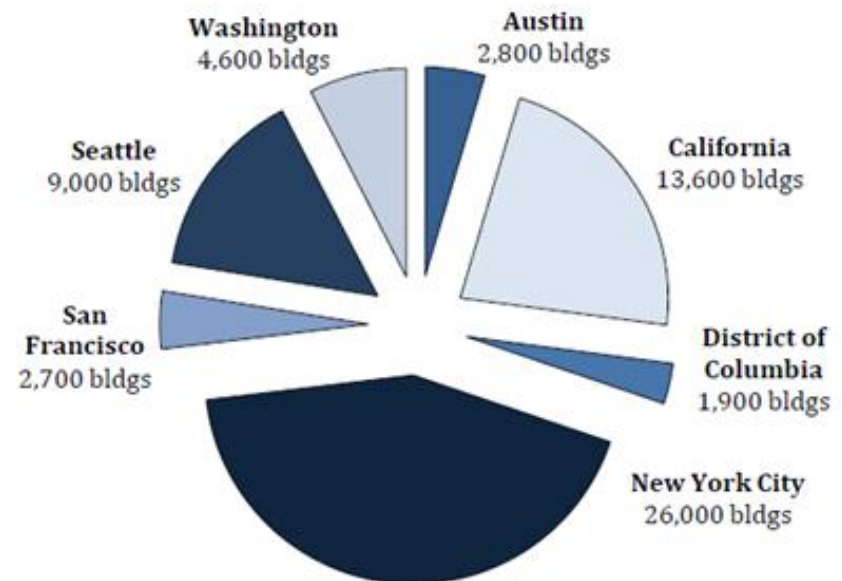
And, more recently, in the United States



Policy impact is already significant



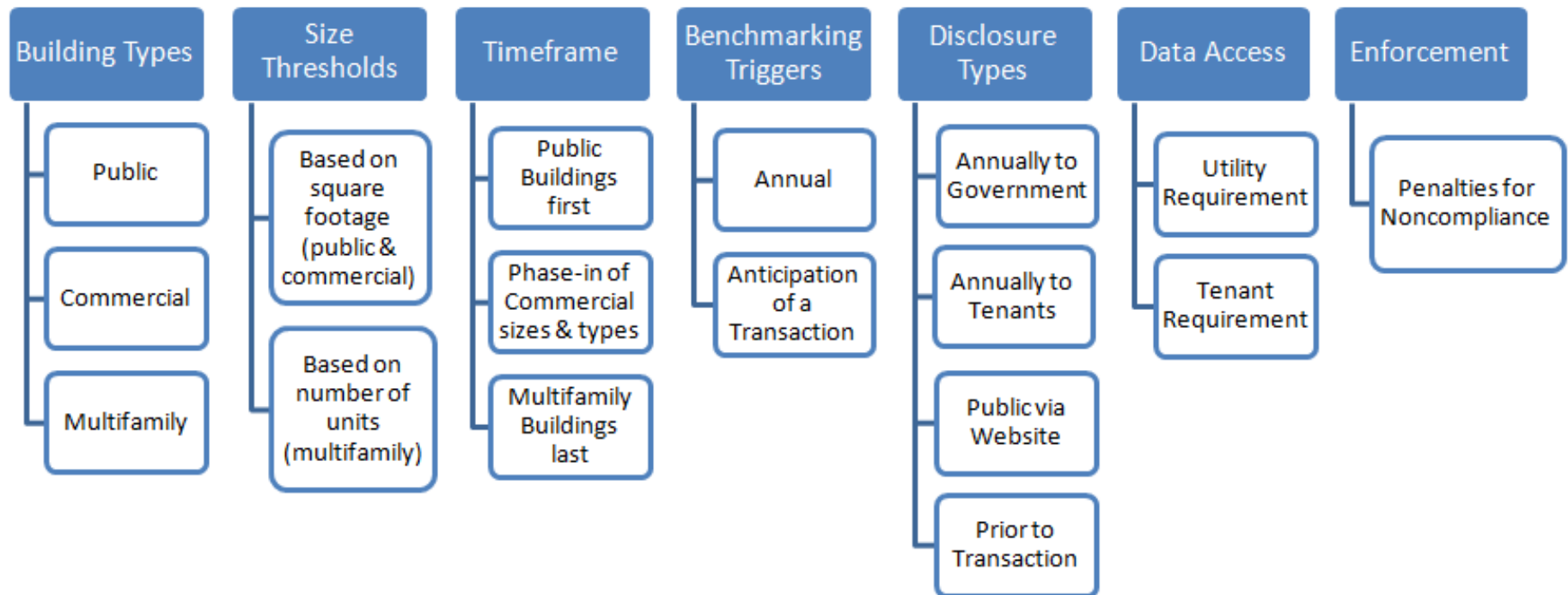
Annual Policy Impact Projection on Building Area (in Square Feet) by Jurisdiction



Annual Policy Impact Projection on Number of Buildings by Jurisdiction

- Approximately 4 billion square feet
- More than 3x the floor area of every Walmart, Target, Home Depot, Barnes & Noble and Costco store in America

Rating & disclosure policy elements



IMT is finalizing a new **Model Legislation and Policy Development Guide** for rating and disclosure – please email caroline@imt.org if you'd like to be sent a copy when available (late December/early January)

Policies vary by jurisdiction

All U.S. policies leverage the ENERGY STAR Portfolio Manager tool

Jurisdiction	Benchmarking (Building Type and Size)		Disclosure					
	Non-residential	Multi-family	On public web site	To local government	To tenants	To transactional counterparties		
						Sale	Lease	Financing
Austin	10k SF+	-	-	✓	-	✓	-	-
California*	1k SF+	-	-	✓	-	✓	✓	✓
District of Columbia	50k SF+	50k SF+	✓	✓	-	-	-	-
New York City	50k SF+	50k SF+	✓	✓	-	-	-	-
San Francisco	10k SF+	-	✓	✓	✓	-	-	-
Seattle	10k SF+	5+ units	-	✓	✓	✓	✓	✓
Washington	10k SF+	-	-	-	-	✓	✓	✓

Implementation Roundtable

Roundtable on Implementing Benchmarking & Disclosure Policy

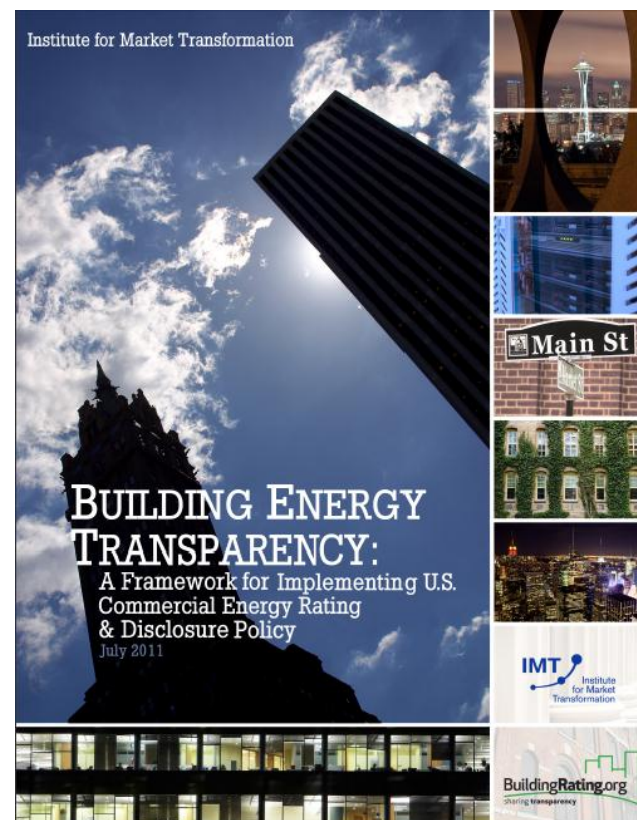
- Nov. 2010 in Washington, DC
- Nation's first event on policy implementation – assessing policy implementation challenges, best practices and opportunities for harmonization
- Attendees included:
 - Austin Energy
 - California Energy Commission
 - California Public Utilities Commission
 - District of Columbia Department of the Environment
 - Maryland Energy Administration
 - Massachusetts Dept. of Energy Resources
 - New York City Mayor's Office of Long-Term Planning & Sustainability
 - Pacific Northwest National Laboratory
 - Portland Bureau of Planning and Sustainability
 - San Francisco Dept. of the Environment
 - Seattle Dept. of Planning & Development
 - Washington State Dept. of General Administration
 - U.S. Environmental Protection Agency, ENERGY STAR division
 - ACEEE
 - ICLEI Local Governments for Sustainability
 - U.S. Green Building Council
 - Northeast Energy Efficiency Partnerships
 - Heschong-Mahone Group
 - New Buildings Institute
 - Transwestern
 - Sustainable Energy Partnerships
 - Resource Media

Building Energy Transparency:

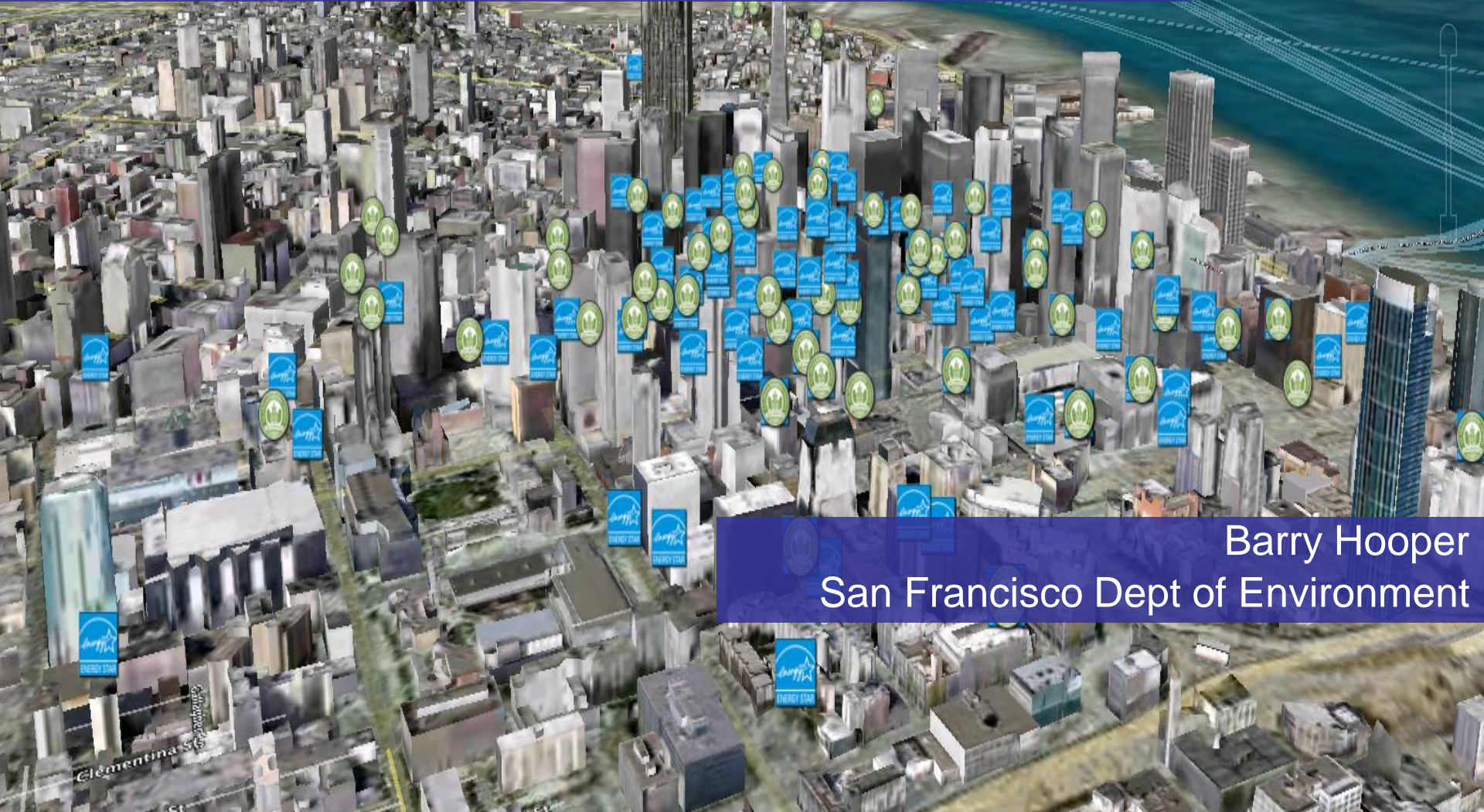
A Framework for Implementing U.S. Commercial
Energy Rating & Disclosure Policy

Challenges and Best Practices of
Implementation in 6 key areas:

- **Outreach, Education and Training**
- Benchmarking Guidance
- **Compliance and Enforcement**
- Data Quality Assurance
- Energy Consumption Data
- Disclosure



Existing Commercial Buildings Energy Performance Ordinance

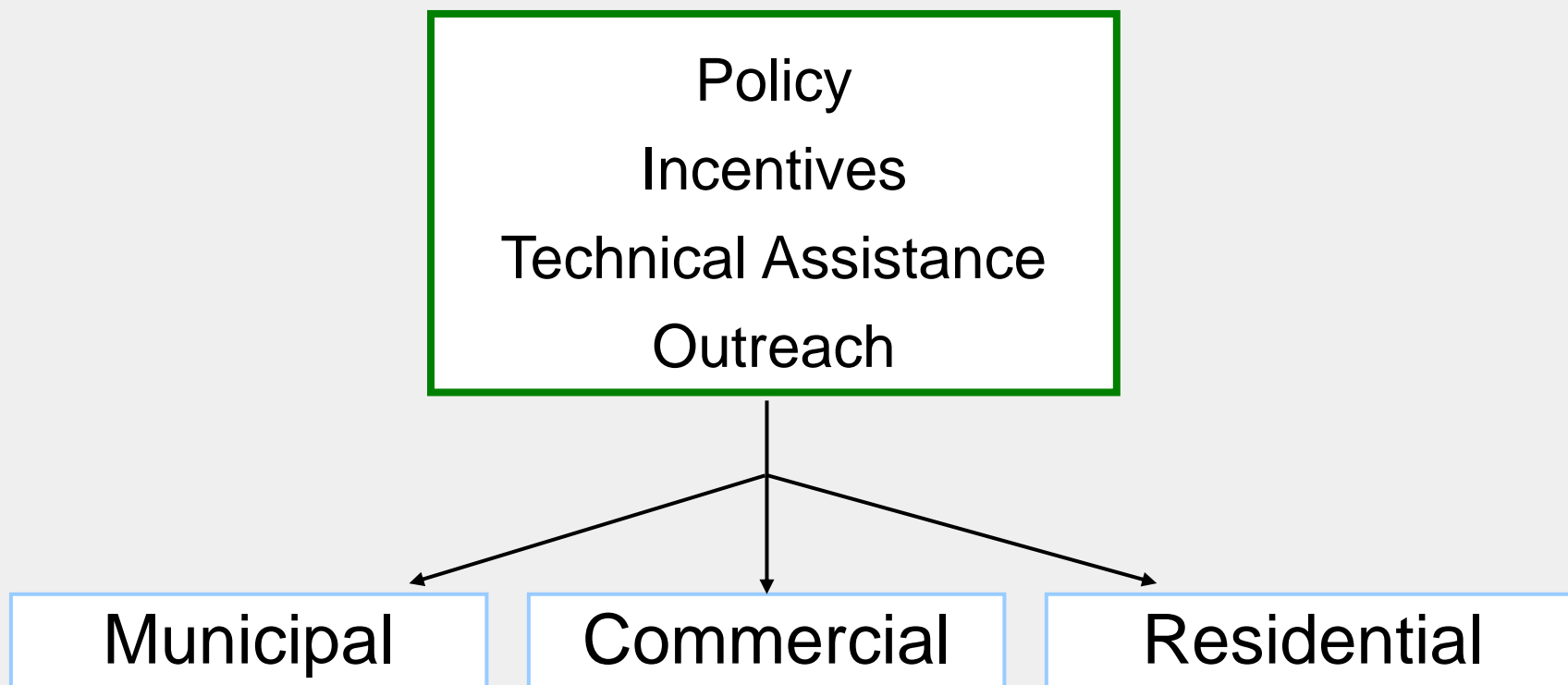


Barry Hooper
San Francisco Dept of Environment

Mission:

- Improve, enhance, and preserve the environment
- Promote San Francisco's long-term well being

Green Building





Mayor's Task Force
on
Existing
Commercial
Buildings

Final Report and
Recommendations For
The City and County of
San Francisco

December 2009



Scope

- Existing Commercial

Composition

- Owners' Representatives
- Property Managers
- Contractors
- Operators
- Engineers
- Architects
- Finance
- Utilities

The Task

- Cost effective energy savings
- Minimum costs
- Measureable

Existing Commercial Buildings:

Recommended Strategy

- Identify potential savings
- Enable informed decisions
- Engage tenants
- Lead by example in public facilities
- Access to capital
- Educate and mentor
- Submetering



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Existing Commercial Buildings Energy Performance Ordinance

Passage of Ordinance	2011 (October 1)	2012 (April 1)	2013 (April 1)	2014 (April 1)
Outreach Early action	Benchmark >50K sq ft ¹	Benchmark >25K sq ft [Disclose >50K sq ft]	Benchmark >10K sq ft [Disclose >25K sq ft]	Continue benchmarking [Disclose >10K sq ft]

¹ First year data is confidential

THE NEW YORK CITY

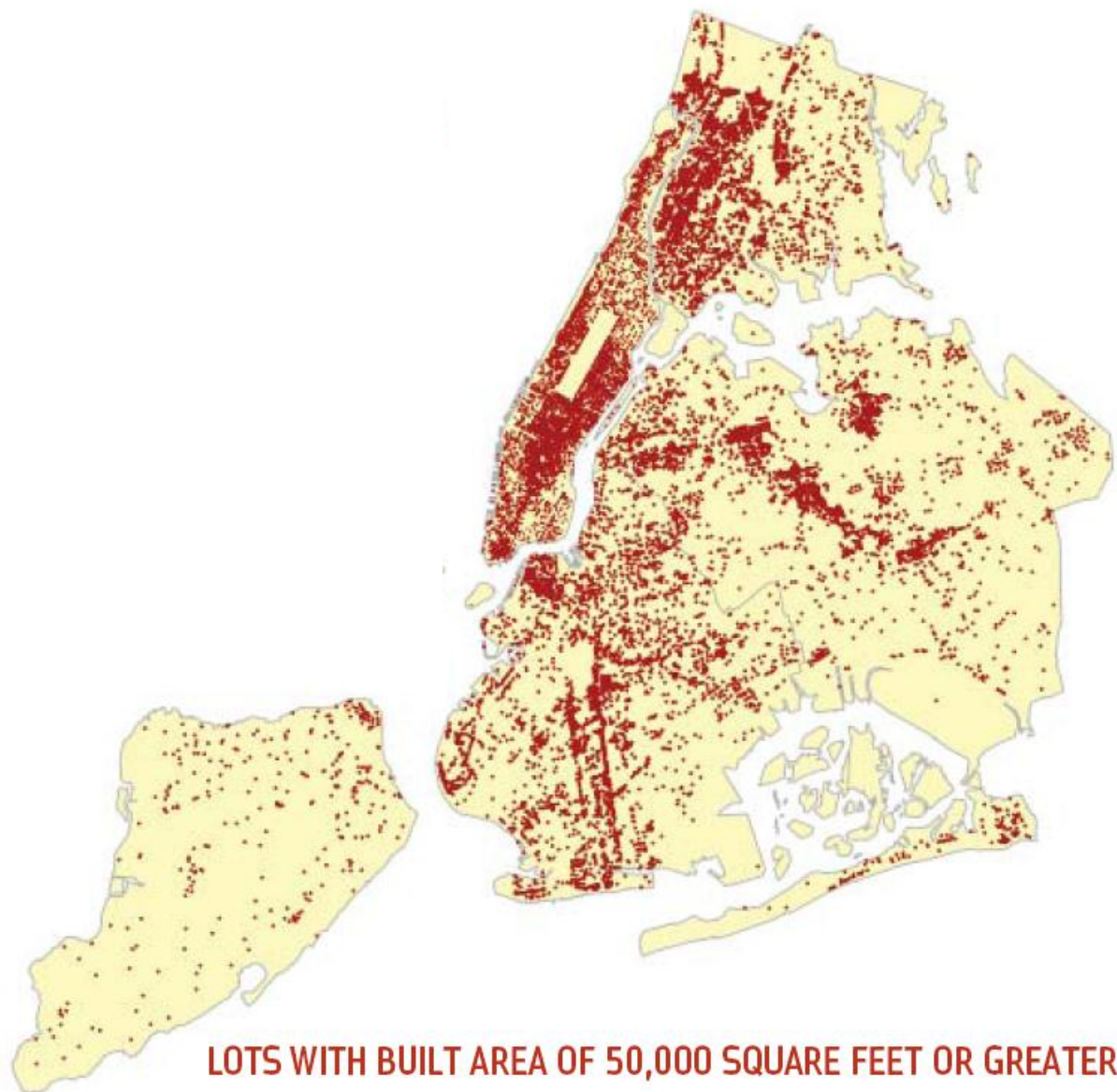
GREENER, GREATER BUILDINGS PLAN

1 New York City
Energy Code

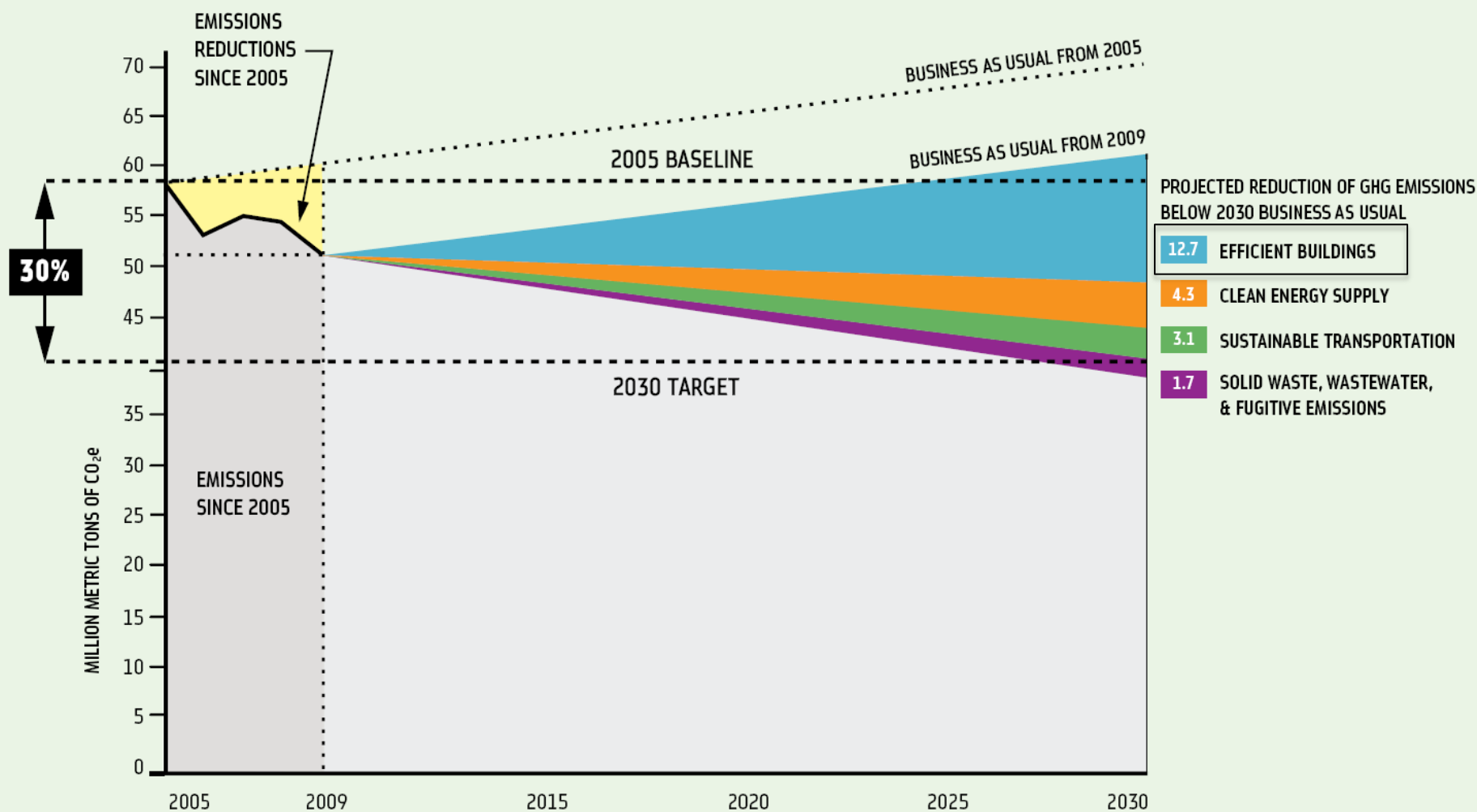
2 Lighting Upgrades and
Sub-Metering

3 Benchmarking

4 Audits and
Retro-Commissioning



Projected Impacts of Our Greenhouse Gas Reduction Strategies



Source: NYC Mayor's Office and M.J. Beck Consulting, LLC

Focus on large buildings

Total Building Area by Building (Lot) Size

Type	All Buildings		Buildings >= 25,000 sf		Buildings >= 50,000 sf	
	Lots	Bldg Area	Lots	Bldg Area	Lots	Bldg Area
Residential	748,661	3,564,219,392	16,381	1,655,467,445	9,384	1,402,209,618
Commercial	32,638	865,940,624	3,724	708,491,558	2,229	656,793,149
Industrial	12,665	333,482,361	2,610	251,677,947	1,309	206,732,698
Institutional	10,320	425,582,946	2,862	370,632,355	1,884	335,610,234
Public	630	68,290,399	188	63,934,298	108	61,095,082
Total	804,914	5,257,515,722	25,765	3,050,203,603	14,914	2,662,440,781

Percent of Total Building Area by Building Size

Type	Lots	All Buildings		Buildings >= 25,000 sf		Buildings >= 50,000 sf	
		Lots	Bldg Area	Lots	Bldg Area	Lots	Bldg Area
Residential	94%	1%	67.8%	2.04%	31.5%	1.17%	26.7%
Commercial	4%	5%	16.5%	0.46%	13.5%	0.28%	12.5%
Industrial	2%	7%	6.3%	0.32%	4.8%	0.16%	3.9%
Institutional	1%	8%	8.1%	0.36%	7.0%	0.23%	6.4%
Public	0%	8%	1.3%	0.02%	1.2%	0.01%	1.2%
Total		100%	100.0%	3.20%	58.0%	1.85%	50.6%

NYC has over 800,000 building lots containing almost a million buildings

...but over half of that area is housed in less than 2% of the lots

Why Benchmark?

- Transparency
- Conservation
- Market Transformation

Requirements

- All buildings over 50,000 square feet
- Annually submit energy and water consumption using EPA's Portfolio Manager

Public Disclosure

- September 1, 2011 – City government buildings
- September 1, 2012 – Non-residential buildings
- September 1, 2013 – Residential buildings

Resources

- Weekly 3-hours classes*
- Online trainings
- Step-by-step instructions (Checklist)
- Benchmarking Help Center* (call-in hotline)
- Step-by-step and FAQ on whole building electricity data

Partners

- Assoc for Energy Affordability
- EPA
- Urban Green Council and the Related Companies
- CUNY graduate students
- Con Edison - providing whole building energy data

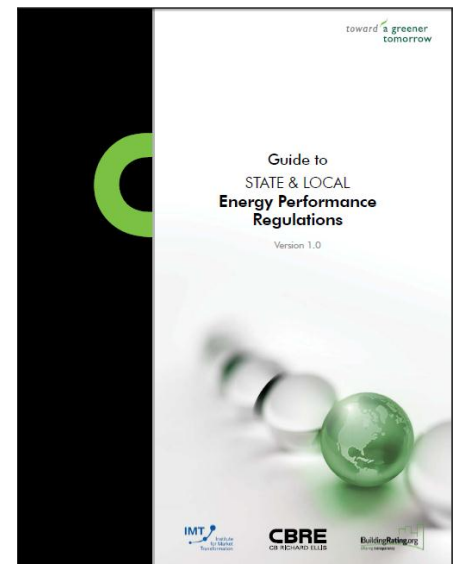
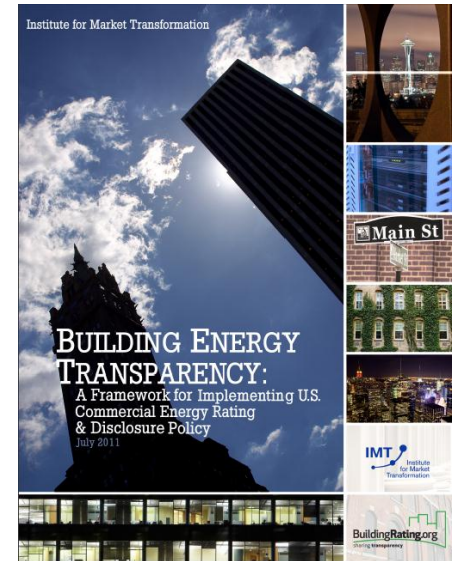
Benchmarking – LL84

- All City-owned buildings have been benchmarked for the second year. Includes 2730 buildings and 260 million square feet.
- Scores and EUI's for City-owned buildings are publically posted; Report recently released:
<http://www.nyc.gov/html/dem/downloads/pdf/Benchmarking%20Report%2011-23-11.pdf>
- **Private sector buildings have submitted for the first time with approximately 67% compliance and 1.5 billion sf. of space;** Second deadline Dec. 31
- Working with university partners to analyze the data

What's Next

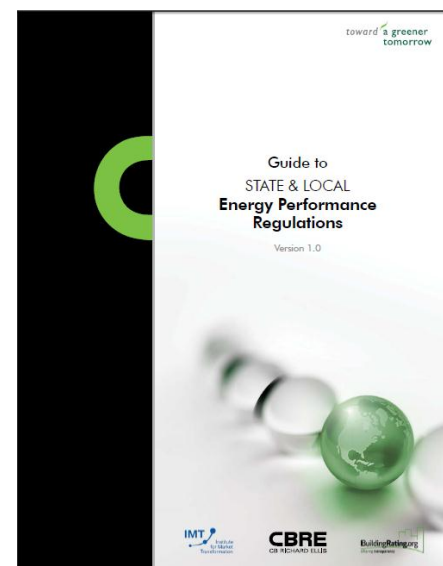
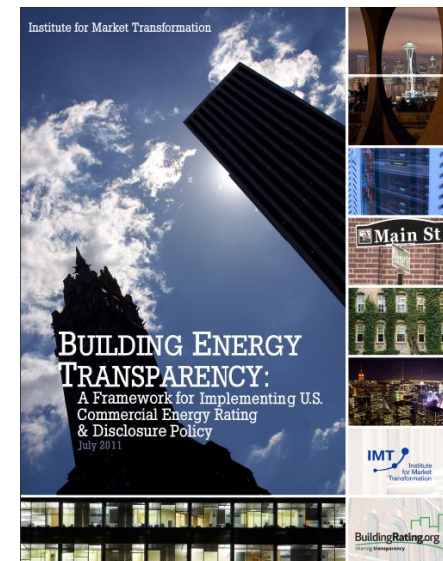
2012:

- Second annual Policy Roundtable with ~25 states and cities in late February/early March
- Energy savings and job creation analysis on benchmarking and disclosure policy
- **Policy development guidance and design report w/ model policy language**
- U.S. DOE energy disclosure platform



Resources

- IMT policy implementation framework
www.buildingrating.org/Building_Energy_Transparency_Implementation_Report
- CB Richard Ellis/IMT regulatory guide
www.cbre.com/USA/Sustainability/Envirometrics
- IMT/ICLEI Commercial Energy Policy Toolkit
www.imt.org/commercialenergypolicytoolkit
- IMT/ICLEI RFA for free technical assistance
www.icleiusa.org/climate_and_energy/energy-efficiency-resources-1/commercial-energy-policy-toolkit/apply-now-for-free-technical-assistance
- IMT's informal rating network
To join, email: caroline@imt.org
- State & Local Energy Efficiency Action Network
www1.eere.energy.gov/seeaction/resources.html#fact





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What information from this or any previous benchmarking webinars would you like more detail?